

Translation

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY  
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference P800228/WO/1	FOR FURTHER ACTION See Form PCT/IPEA/416	
International application No. PCT/DE2003/003088	International filing date (day/month/year) 17 September 2003 (17.09.2003)	Priority date (day/month/year) 20 September 2002 (20.09.2002)
International Patent Classification (IPC) or national classification and IPC B05B 7/00		
Applicant DAIMLERCHRYSLER AG		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 6 sheets, including this cover sheet.

3. This report is also accompanied by ANNEXES, comprising:

a. ☐ (sent to the applicant and to the International Bureau) a total of \_\_\_\_\_ sheets, as follows:

☐ sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).

☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.

b. ☐ (sent to the International Bureau only) a total of \_\_\_\_\_, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:

☒ Box No. I Basis of the report

☐ Box No. II Priority

☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

☐ Box No. IV Lack of unity of invention

☒ Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

☐ Box No. VI Certain documents cited

☐ Box No. VII Certain defects in the international application

☐ Box No. VIII Certain observations on the international application

Date of submission of the demand 02 April 2004 (02.04.2004)	Date of completion of this report 10 November 2004 (10.11.2004)
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/DE2003/003088

## Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This report is based on translations from the original language into the following language \_\_\_\_\_, which is language of a translation furnished for the purpose of:

- ☐ international search (under Rules 12.3 and 23.1(b))  
☐ publication of the international application (under Rule 12.4)  
☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

☒ The international application as originally filed/furnished

☒ the description:

pages \_\_\_\_\_ 1-12 \_\_\_\_\_, as originally filed/furnished

pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

☒ the claims:

pages \_\_\_\_\_ 1-13 \_\_\_\_\_, as originally filed/furnished

pages\* \_\_\_\_\_, as amended (together with any statement) under Article 19

pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

☒ the drawings:

pages \_\_\_\_\_ 1/4-4/4 \_\_\_\_\_, as originally filed/furnished

pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

☐ the description, pages \_\_\_\_\_

☐ the claims, Nos. \_\_\_\_\_

☐ the drawings, sheets/figs \_\_\_\_\_

☐ the sequence listing (*specify*): \_\_\_\_\_

☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

☐ the description, pages \_\_\_\_\_

☐ the claims, Nos. \_\_\_\_\_

☐ the drawings, sheets/figs \_\_\_\_\_

☐ the sequence listing (*specify*): \_\_\_\_\_

☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/DE 03/03088

## V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

### 1. Statement

Novelty (N)	Claims	3, 4, 6-13	YES
	Claims	1, 2, 5, 9, 10, 12, 13	NO
Inventive step (IS)	Claims	3, 4, 6-13	YES
	Claims		NO
Industrial applicability (IA)	Claims	1-13	YES
	Claims		NO

### 2. Citations and explanations

#### Novelty, inventive step and industrial applicability

#### **Claim 1**

1. **US-A-2 749 176 (D1)** discloses (see column 2, line 13 to column 4, line 35 and figures 1 and 2) an electric arc burner for spraying an electric arc, comprising at least two burner tubes 56, 57 for supplying electrodes 24, 25 in the form of wires which are guided towards the surface of an object to be coated through the burner tube 56, 57 by a supply device comprising numerous rotatably mounted guiding and/or sliding elements 37, 38, 39. The supply device which comprises the guiding and/or sliding elements deforms the wire 24, 25 in an elastic or plastic area and is integrated in the burner tube 56, 57 or received therein, and the sliding elements are designed as rollers 37, 38, 39.

2. The subject matter of claim 1 is therefore not novel within the meaning of PCT Article 33(2).

**Claims 2, 5, 9, 10, 12 and 13**

1. Document D1 (loc. cit.) also discloses an electric arc wire burner as per claim 1, in which:
  - the burner is formed of three combinable components 46, 47, 56, and the supply device with its sliding elements 37, 38, 39 is integrated into the burner in the area of at least one sectional plane of two combinable parts 46, 56;
  - the deflection device comprises numerous spaced deflecting rollers 37, 38, 39 arranged one behind the other which co-operate with at least one deflecting roller 37, 38, 39 of equal or greater diameter which, together with the numerous deflecting rollers 37, 38, 39, forms a guide path for receiving the wire 24, 25;
  - the deflecting rollers comprise a guide groove for guiding the wire 24, 25, which is arranged concentrically with the axis;
  - numerous deflecting rollers 37 arranged one behind the other in a first series and, at a distance therefrom, in a second series are provided for guiding the wire 24, 25; and
  - at least three deflecting rollers 37 are provided, two of which are arranged one behind the other.
4. The subjects defined by claims 2, 5, 9, 10, 12 and 13, which are dependent on claim 1, are therefore not novel within the meaning of PCT Article 33(2).

**Claim 3**

5. The invention defined in claim 3 complies with the requirements of PCT Article 33(2) to (4) with regard to novelty, inventive step and industrial applicability.
6. Since none of the documents cited in the search report or acknowledged in the introductory portion of the description discloses all the features of claim 3, the subject matter of claim 3 is novel.
7. A person skilled in the art is not prompted by the search report citations to design the burner tube of an electric arc wire burner as per D1 in the manner defined in claim 3. The measure whereby the burner or the supply tube has an approximately circular cross-section, viewed from the front, and the central segment of the burner or of the supply tube is approximately wedge-shaped results from a step which is not a logical development of the cited prior art. Consequently, the electric arc wire burner as per claim 3 involves an inventive step.

**Claims 6 to 13**

8. So far as dependent claims 6 to 13 are dependent on claim 3, they contain advantageous and non-obvious developments of the electric arc wire burner as per claim 3 and therefore likewise comply with the requirements of PCT Article 33(2) and (3) with regard to novelty and inventive step.
9. The electric arc wire burner defined by claims 1 to 13 can be used and made and is therefore also considered to be industrially applicable.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International Application No.

PCT/DE 03/03088

Certain defects in the international application

10. The description does not cite document D1 as the closest prior art (PCT Rule 5.1(a)(ii)).